

Trapezoidal Rule Practice

Date _____ Period _____

© 2013 Kuta Software LLC. All rights reserved.

For each problem, approximate the area under the curve over the given interval using 4 trapezoids.

1) $y = x + 6$; $[1, 5]$

2) $y = x + 4$; $[-2, 2]$

For each problem, approximate the area under the curve over the given interval using 5 trapezoids.

3) $y = -x^2 - 2x + 9$; $[-3, 2]$

4) $y = \frac{2}{x}$; $[2, 7]$

For each problem, approximate the area under the curve over the given interval using 3 trapezoids.

5) $y = -\frac{x^2}{2} + x + 5$; $[0, 3]$

6) $y = \frac{x^2}{2} + x + 1$; $[-2, 1]$

Trapezoidal Rule Practice

© 2013 Kuta Software LLC. All rights reserved.

For each problem, approximate the area under the curve over the given interval using 4 trapezoids.

1) $y = x + 6$; $[1, 5]$

36

2) $y = x + 4$; $[-2, 2]$

16

For each problem, approximate the area under the curve over the given interval using 5 trapezoids.

3) $y = -x^2 - 2x + 9$; $[-3, 2]$

$$\frac{75}{2} = 37.5$$

4) $y = \frac{2}{x}$; $[2, 7]$

$$\frac{89}{35} \approx 2.543$$

For each problem, approximate the area under the curve over the given interval using 3 trapezoids.

5) $y = -\frac{x^2}{2} + x + 5$; $[0, 3]$

$$\frac{59}{4} = 14.75$$

6) $y = \frac{x^2}{2} + x + 1$; $[-2, 1]$

$$\frac{13}{4} = 3.25$$